



BEST AVAILABLE COPY

SEQUENCE LISTING

<110> Boneham et al.

<120> Peptide presentations for human immunodeficiency virus vaccines

<130> 87792.065605

<140> US 10/537,852

<141> 2005-06-08

<150> GB 0228939.5

<151> 2002-12-12

<160> 126

<170> PatentIn version 3.1

<210> 1

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<213> Human immunodeficiency virus

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Glu Leu Asp Lys Trp Ala  
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<213> Human immunodeficiency virus

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Leu Asp Lys Trp  
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Ala Leu Asp Lys Trp Ala  
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Glu Leu Asn Lys Trp Ala  
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Glu Leu Asp Lys Trp Ala  
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Ala Leu Asp Thr Trp Ala  
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Gln Leu Asp Lys Trp Ala  
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Glu Leu Asp Thr Trp Ala  
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Gly Leu Asp Lys Trp Ala  
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Glu Leu Asp Arg Trp Ala  
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Asn Trp Phe Asp Ile Thr  
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Thr Trp Phe Asp Ile Ser  
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Ser Trp Tyr Asp Ile Ser  
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Ser Trp Phe Asp Ile Thr  
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Thr Trp Phe Asp Ile Thr  
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Ser Trp Phe Ser Ile Ser  
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Asp Trp Phe Ser Ile Thr  
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Asp Trp Phe Asp Ile Thr  
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Asn Trp Phe Ser Ile Ser  
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Asn Trp Phe Asp Met Ser  
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Ser Trp Phe Gly Ile Thr  
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Asp Trp Phe Ser Ile Ser  
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Xaa Trp Xaa Xaa Xaa Xaa  
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Trp Phe Xaa Ile  
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His Glu Arg Ser Tyr Met Phe Ser Asp Leu Glu Asn Arg  
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Leu Asp Lys Trp Ala Ser  
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Lys Asn Glu Gln Asp Leu Leu Ala  
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Lys Asn Glu Lys Glu Leu Leu Glu  
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Lys Asn Glu Gln Glu Leu Leu Ala  
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Arg Asn Glu Lys Asp Leu Leu Glu  
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Glu Asn Glu Lys Glu Leu Leu Glu  
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Arg Asn Glu Lys Glu Leu Leu Glu



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Glu Asn Glu Gln Glu Leu Leu Glu  
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Lys Asn Glu Gln Gly Leu Leu Glu  
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Lys Asn Glu Gln Glu Leu Leu Lys  
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Gln Asn Glu Lys Asp Leu Leu Ala  
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Glu Asn Glu Lys Asp Leu Leu Ala  
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Arg Asn Glu Gln Glu Leu Leu Glu  
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Arg Asn Glu Gln Glu Leu Leu Ala  
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Gln Asn Glu Gln Asp Leu Leu Ala  
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Thr Asn Glu Lys Asp Leu Leu Ala  
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Arg Asn Glu Lys Asp Leu Leu Lys  
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Arg Asn Glu Lys Asn Leu Leu Glu  
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Lys Asn Glu Gln Asp Leu Leu Ser  
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Met Asn Glu Gln Asp Leu Leu Ala

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Lys Asn Lys Gln Asp Leu Leu Ala  
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Met Asn Glu Gln Asp Leu Leu Gln  
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Ile Asn Glu Arg Asp Leu Leu Ala  
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Lys Ser Glu Lys Asp Leu Leu Glu  
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Tyr Asn Glu Lys Lys Leu Leu Glu  
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Thr Asn Glu Lys Ala Leu Leu Glu  
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Thr Asn Glu Lys Ser Leu Leu Glu  
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Ala Glu Gly Glu Phe  
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Cys Cys Pro Val Glu Gly Ala Trp Arg Trp Arg Gly  
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Ala Glu Gly Glu Phe Ala Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp  
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Lys Trp Ala Ser Leu Trp Cys Cys Phe Asn Ile Thr Asn Trp Leu Trp  
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<213> Human immunodeficiency virus

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Asn Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp  
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Ala Ser Leu Trp Asn Trp Phe Asn Ile Thr Asn Trp Cys Cys  
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Ala Glu Gly Glu Phe Ala Ala Ala Ala His Glu Arg Ser Tyr Met Phe  
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Ser Asp Leu Glu Asn Arg Cys Cys Ile  
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                     20                      25                      30  
 Gly Asp Pro Ala Lys Ala Ala Phe Asp Ser Leu Gln Ala Ser Ala Thr  
                     35                      40                      45  
 Glu Tyr Ile Gly Tyr Ala Trp Ala Met Val Val Val Ile Val Gly Ala  
                     50                      55                      60  
 Thr Ile Gly Ile Lys Leu Phe Lys Lys Phe Thr Ser Lys Ala Ser  
                     65                      70                      75

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 <212> DNA  
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<220>  
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 gagggcgcct ggcgctggcg cgg 83

<210> 117  
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<210> 119  
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Ala Glu Gly Glu Phe Glu Trp Glu Asp Val Glu Phe Glu Leu Asp Arg  
 1 5 10 15

Trp Ala Leu Arg Ser Cys Cys Pro Val Glu Gly Ala Trp Arg Trp Arg  
 20 25 30

Gly Arg Gln Ala Lys Ala Val Gln Val Tyr Asn Ser Arg Lys Ser Glu  
 35 40 45

Leu Asp Ala Ala Asn Lys Thr Leu Ala Asp Ala Ile Ala Glu Ile Lys  
 Page 28

50

55

60

Gln Phe Asn Arg Phe Ala His Asp Pro Met Ala Gly Gly His Arg Met  
65 70 75 80

Trp Gln Met Ala Gly Leu Lys Ala Gln Arg Ala Gln Thr Asp Val Asn  
85 90 95

Asn Lys Gln Ala Ala Phe Asp Ala Ala Ala Lys Glu Leu Glu His His  
100 105 110

His His His His  
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<210> 124  
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<212> PRT  
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<220>  
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Gly Tyr Ile Pro Glu Ala Pro Arg Asp Gly Gln Ala Tyr Val Arg Lys  
1 5 10 15

Asp Gly Glu Trp Val Leu Leu Ser Thr Phe Leu  
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<210> 125  
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<400> 125

Ala Glu Gly Glu Phe Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys  
1 5 10 15

Trp Ala Ser Leu Ser Tyr Ile Pro Glu Ala Pro Arg Asp Gly Gln Ala  
20 25 30

Tyr Val Arg Lys Asp Gly Glu Trp Val Leu Leu Ser Thr Phe Leu  
35 40 45

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Arg Gly Arg Gln Ala Lys Ala Val Gln Val Tyr Asn Ser Arg Lys Ser  
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Glu Leu Asp Leu Ser Cys Cys Pro Ala Ala Asn Lys Thr Leu Ala Asp  
20 25 30

Ala Ile Ala Glu Ile Lys Gln Phe Asn Arg Phe Ala His Asp Pro Met  
35 40 45

Ala Gly Gly His Arg Met Trp Gln Met Ala Gly Leu Lys Ala Gln Arg  
50 55 60

Ala Gln Thr Asp Val Asn Asn Lys Gln Ala Ala Phe Asp Ala Ala Ala  
65 70 75 80

Lys Glu Leu Glu Leu Val Pro Arg Gly Ser  
85 90